LISTING OF THE CLAIMS

1. (Currently Amended) Dry powder inhaler, comprising:

a mouthpiece for dispersing pharmaceutical drug formulations,

a Laval nozzle communicating with the mouthpiece,

a ~~device—~~multidose blister container for supplying a powder formulation in communication with the Laval nozzle,

an auxiliary energy source in the form of a pressure medium system in communication with the device for supplying the powder formulation,

wherein upon activation of the pressure medium system, a gaseous pressure medium is released into the device for supplying the powder formulation, and forms an aerosol with the powder formulation in such a way that the powder particles are present in dispersed form within the gaseous pressure medium prior to entering the Laval nozzle, entering the mouthpiece, and leaving the inhaler.

2-6. (Cancelled)

7. (Currently Amended) Dry powder inhaler according to claim 1, characterized in that ~~the~~ a narrowest cross section of the Laval nozzle is about 100 um to 1500 um.

8. (Cancelled)

9. (Previously Presented) Dry powder inhaler according to claim 1, characterized in that the pressure medium system includes a pump that uses ambient air as the pressure medium.

10. (Previously Presented) Dry powder inhaler according to claim 1, characterized in that the pressure medium system includes a cartridge that stores the pressure medium.

11. (Cancelled)

12. (Previously Presented) Dry powder inhaler according to claim 10, characterized

in that air, N2, CO2, Ar, or He is provided as the pressure medium.

13. (Previously Presented) Dry powder inhaler according to claim 1, characterized in that the device for supplying the powder formulation is placed between the pressure medium system and the Laval nozzle in such a way that the pressure medium must pass through the device.

14. (Previously Presented) Dry powder inhaler according to claim 1, characterized in that the device for supplying the powder formulation comprises a capsule filled with powder.

15. (Cancelled)

16. (Cancelled)

17. (Previously Presented) Dry powder inhaler according to claim 1, wherein the mouthpiece comprises a flow rate sensor that generates an input signal for the pressure medium system.

18. (Currently Amended) Dry powder inhaler according to claim 1, further comprising an inlet channel, whereby inhalation air is drawn in through the inlet channel, and whereby a swirling flow of the inhalation air is created between the ~~outlet section~~ inlet channel and ~~the outlet of~~ the mouthpiece.

19. (Previously Presented) Dry powder inhaler according to claim 1, characterized in that the Laval nozzle and an inlet channel for inhalation air are arranged in such a way that the aerosol flow leaving the Laval nozzle and the inhalation air are directed in opposite directions.

20. (Previously Presented) Dry powder inhaler according to claim 1, characterized in that the Laval nozzle and an inlet channel for inhalation air are arranged in such a way that the aerosol flow leaving the Laval nozzle and the inhalation air collide with each other at an angle.

21. (Currently Amended) Dry powder inhaler according to claim 18, characterized in that a channel that guides the aerosol flow and the inlet ~~channels~~ channel for the inhalation air empty into a swirl chamber, whereby the aerosol is directed from the swirl chamber to the Laval nozzle.

22-34. (Cancelled)

25. (New) A dry powder inhaler, comprising:

a mouthpiece for dispersing pharmaceutical drug formulations,

a nozzle communicating with the mouthpiece,

a multidose blister container for supplying a powder formulation in communication with the nozzle,

an auxiliary energy source in the form of a pressure medium system in communication with the device for supplying the powder formulation,

wherein upon activation of the pressure medium system, a gaseous pressure medium is released into the device for supplying the powder formulation, and forms an aerosol with the powder formulation in such a way that the powder particles are present in dispersed form within the gaseous pressure medium prior to entering the nozzle, entering the mouthpiece, and leaving the inhaler.

26. (New) The dry powder inhaler according to claim 25, characterized in that the nozzle and an inlet channel for inhalation air are arranged in such a way that the aerosol flow leaving the nozzle and the inhalation air are directed in opposite directions.

27. (New) The dry powder inhaler according to claim 25, characterized in that a channel that guides the aerosol flow and the inlet channels for the inhalation air empty into a swirl chamber, whereby the aerosol is directed from the swirl chamber to the nozzle.

28. (New) A dry powder inhaler, comprising:

a mouthpiece for dispersing pharmaceutical drug formulations,

a nozzle communicating with the mouthpiece,

a multidose blister container for supplying a powder formulation in communication with the nozzle,

an auxiliary energy source in the form of a pressure medium system in communication with the device for supplying the powder formulation, wherein:

the mouthpiece comprises a flow rate sensor that generates an input signal for the pressure medium system, and

upon activation of the pressure medium system, a gaseous pressure medium is released into the device for supplying the powder formulation, and forms an aerosol with the powder formulation in such a way that the powder particles are present in dispersed form within the gaseous pressure medium prior to entering the nozzle, entering the mouthpiece, and leaving the inhaler.

29. (New) The dry powder inhaler according to claim 28, characterized in that the nozzle and an inlet channel for inhalation air are arranged in such a way that the aerosol flow leaving the nozzle and the inhalation air are directed in opposite directions.

30. (New) The dry powder inhaler according to claim 28, characterized in that a channel that guides the aerosol flow and the inlet channels for the inhalation air empty into a swirl chamber, whereby the aerosol is directed from the swirl chamber to the nozzle.

31. (New) A dry powder inhaler, comprising:

a mouthpiece for dispersing pharmaceutical drug formulations,

a Laval nozzle communicating with the mouthpiece, the Laval nozzle including a narrowing inlet section, a section of narrowest cross-section, and a widening outlet section,

a device for supplying a powder formulation in communication with the Laval nozzle,

an auxiliary energy source in the form of a pressure medium system in communication with the device for supplying the powder formulation, wherein:

upon activation of the pressure medium system, a gaseous pressure medium is released into the device for supplying the powder formulation, and forms an aerosol with the powder formulation in such a way that the powder particles are present in dispersed form within the gaseous pressure medium prior to entering the Laval nozzle, and

the powder particles achieve a supersonic speed in the narrowing inlet section of the Laval nozzle and are decelerated to subsonic speed in the widening outlet section of the Laval nozzle.

32. (New) The dry powder inhaler according to claim 31, characterized in that the narrowest cross section of the Laval nozzle is about 100 um to 1500 um.

33. (New) A dry powder inhaler, comprising:

a mouthpiece for dispersing pharmaceutical drug formulations,

an aperture of predetermined shape communicating with the mouthpiece,

a device for supplying a powder formulation in communication with the aperture,

an auxiliary energy source in the form of a pressure medium system in communication with the device for supplying the powder formulation, wherein:

upon activation of the pressure medium system, a gaseous pressure medium is released into the device for supplying the powder formulation, and forms an aerosol with the powder formulation in such a way that the powder particles are present in dispersed form within the gaseous pressure medium prior to entering the aperture, and

the aperture is shaped such that it introduces turbulence to the powder particles and that particle sizes of between about 1-5 um do not stick together prior to leaving the mouthpiece.